

C-17 testers airdrop Army Stryker mobile gun system

by 1st Lt. Brooke Davis Air Force Flight Test Center Public Affairs

8/19/2004 - **EDWARDS AIR FORCE BASE, Calif. (AFPN)** - An aircrew from the C-17 Globemaster III combined test force here successfully airdropped a mobile gun system for the first time during a feasibility test Aug. 13. The system fits the Army's Stryker engineer squad vehicle.

The Army is testing the 52,500-pound system to possibly equip the armored vehicle to meet operational needs.

"There is a present need to have airdrop capability for the mobile gun system, and we performed the feasibility test to see if the impact of an airdrop is consistent with static impact testing the Army has already completed," said Alec Dyatt, 418th Flight Test Squadron C-17 CTF flight test engineer.

Before the airdrop here, the Army performed static airdrop impact tests to build a honeycomb cargo carrier for the system to absorb energy generated by a 12-foot drop, Mr. Dyatt said.



EDWARDS AIR FORCE BASE, Calif. -- An Army Stryker engineer squad vehicle equipped with a mobile gun system is airdropped Aug. 13 from a C-17 Globemaster III from the 418th Flight Test Squadron here. (U.S. Air Force photo by Kevin Kidd)

During those tests, the Stryker was equipped with strain gages to measure the forces on the vehicle after a 12-foot drop, Mr. Dyatt said.

The purpose of the feasibility airdrop was to verify if the extraction system was adequate, demonstrate the system could be extracted safely and verify there was sufficient clearance in the C-17 for it to be extracted, said Dan Jones, a 418th FLTS systems engineer.

"We built up to this test by dropping a cargo container that contained steel plates with the same mass properties as the mobile gun system (on Aug. 11)," Mr. Jones said.

The cargo container is equipped with 10 100-foot diameter parachutes that allow the container to hit the ground with the same force as if it had been dropped from 12 feet, Mr. Jones said.

During the airdrop, the cargo was pulled out of the aircraft with three 28-foot parachutes that are attached to the cargo platform, Mr. Jones said. After leaving the aircraft, 10 100-foot parachutes open, allowing the cargo to drift to the ground at about 28 feet-per-second.

"The next step after the feasibility test is to have the Stryker vehicle undergo full developmental testing, which will conclude when the Army performs three operational extractions," said Maj. Landon Henderson, 418th FLTS C-17 test director and test pilot.